

# **DIVYANSH CHANDRA**



Mathematical Olympiad Gold Medalist | Coding & Technological Innovator | Community Service Leader | Musician & Athlete | Future STEM Professional

**Email | Singapore** 

# **ABOUT ME**

Driven technologist and mathematics enthusiast with a commitment to excellence in academics and diverse passions. With a background in AI research, competitive mathematics, and programming, I combine analytical thinking with creative problem-solving. My experience ranges from publishing research on AI in finance to developing specialized applications and mentoring others. I'm passionate about leveraging technology for positive social impact while maintaining a balanced approach.

### Key strengths include:

- Research and academic excellence with perfect scores in UKMT Senior Mathematics Challenge
- Al development experience culminating in published research on Al applications in finance
- Technical leadership in both programming projects and community service initiatives
- Strong mentoring abilities developed through Taekwondo coaching and educational outreach
- Cross-cultural understanding from global competitions and community service

# PROFESSIONAL EXPERIENCE

# Researcher

# Research Paper Co-Author | With Dr. Mudasir Younis

### MM. YY. - MM. YY.

- Authored "The Impact and Adoption of Artificial Intelligence in Finance and Economics: A Cross-Country Analysis"
- Conducted cross-country survey across India, Singapore, Pakistan, and Türkiye
- Employed Non-Metric Multidimensional Scaling (NMDS) for data analysis
- Paper accepted for publication in Journal of Mathematical Sciences (Springer) with submissions to Indian Journal of Pure and Applied Sciences, IRE, and International Journal of Multidisciplinary

# **Technology Developer**

# **Women Safety App Project**

### MM. YY. - MM. YY.

- Designed and launched safety application with location tracking capabilities
- Implemented emergency contact system with live location sharing
- Created intuitive user interface for quick activation during emergencies

### **Chair of Electronic Outreach with Seniors**

# **Lion Befrienders**

#### MM. YY. - MM. YY.

- Led volunteer training sessions on integrating electronics into textiles
- Taught senior citizens to operate sewing machines and handle electronic equipment
- Developed curriculum for creating LED projects and interactive textiles

• Managed team of student volunteers in community education initiative

#### Taekwondo Instructor/Assistant Coach

#### MM. YY. - MM. YY.

- Taught junior students self-defense techniques and taekwondo fundamentals
- Helped break down complex movements into simpler steps for new learners
- Provided constructive feedback to help students improve technique and confidence
- Developed leadership, patience, and communication skills through teaching

### **EDUCATION**

#### **IGCSE Exams**

- Additional Mathematics (0606)
- Cambridge International Mathematics (0607)
- Co-ordinated Sciences (Double Award) (0654)
- Co-ordinated Sciences (Double Award) (0654)
- Design and Technology (0445)
- Enterprise (0454)
- First Language English (0500)
- World Literature (0408)

### International General Certificate of Secondary Education (IGCSE)

- Achieved 8A\* out of 8 subjects taken
- Subjects: Additional Mathematics, Cambridge International Mathematics, Co-ordinated Sciences (Double Award), Design and Technology, Enterprise, First Language English, World Literature

### **Inspirit AI Program**

- Intensive AI education program developed by Stanford and MIT graduates
- Developed advanced Natural Language Processing model for stock market sentiment analysis
- Built model to predict buy/sell/hold decisions based on social media sentiment
- Gained hands-on experience with data processing, model optimization, and validation

#### **Certifications:**

- Second Degree Black Belt (Dan 2) in Taekwondo
- Grade 6 in Carnatic Flute

# **VOLUNTEERING**

#### **RO System in Rajasthan**

- Personally funded installation of Reverse Osmosis Water Filtration Plant (₹25,000)
- Provided clean drinking water access for 270 students and teachers
- Identified health risks from unfiltered water during school visit
- Used personal savings earned through flute performances

#### Christian Outreach for the Handicapped (COH) Volunteer

- Provided care and support for residents with disabilities
- Taught skills and facilitated activities for residents
- Gained perspective on challenges faced by people with disabilities

# **Willing Hearts Volunteer**

- Assisted at Singapore's leading soup kitchen charity
- Prepared meals for migrant workers and marginalized communities
- Performed food preparation, cleaning, and distribution tasks

# **Coding for Good Service**

- Developed temperature and pH monitoring system for aquarium management
- Implemented automated alert systems for maintenance needs

- Applied programming skills in Python, Java, HTML, and CSS
- Combined coding knowledge with circuitry expertise from Design & Technology studies

# **ORGANIZATIONS**

#### **TED-ED Club Member (since Grade 9)**

- Delivered two TED Talks: one on mental health and one on AI research
- Developed speech writing and delivery skills
- · Gained confidence speaking in front of large audiences
- Participated in impromptu speaking activities

#### **Maths Circle**

- Explored daily applications of mathematics beyond school curriculum
- Developed Olympiad problem-solving skills
- Studied advanced mathematical concepts to prepare for competitions
- Deepened appreciation for mathematics through complex problem-solving

#### **Chess Club**

- Solved puzzles and participated in friendly competitions
- Studied chess strategies through video lessons
- Developed critical thinking and strategic planning skills

#### **Badminton Team**

- Member of school's ACSIS A team since Grade 8
- Developed teamwork and sportsmanship
- Encouraged teammates to excel in competitive matches

# Taekwondo (practicing since age 5-6)

- Second Degree Black Belt (Dan 2)
- Instructed junior students in technique and self-defense
- Currently training for Kyorugi (sparring) tournaments
- Developed discipline, physical fitness, and leadership skills

# **ACTIVITIES AND INTEREST**

#### **Sports:**

- Basketball Boys U19D Team (Grade 9)
- 19U C Badminton Boys Team (Grade 9)
- HS Mixed Badminton (Grades 8-10)
- MS Cricket 14&U Team (Grades 7-8)
- Dragons Basketball Team 14&U B Boys (Grades 6-7)
- MS Cricket Team 12&U A Boys (Grade 6)
- MS Basketball Team 12&U A Boys (Grade 6)
- MS Badminton Team 12&U A Boys (Grade 6)

#### Clubs & Organizations:

- Maths Circle (Grades 9-10)
- TEDEd Club (Grades 9-10)
- Chess Club (Grades 9-10)
- Competition Maths Club (Grades 9-10)
- Investment Society (Grade 9)
- Video Game Development (Grade 8)
- Coding for all (Grade 8)
- MS Electronics Club (Grade 7)
- MS Radical Maths (Grade 7)
- MS Writers Club (Grades 6-7)
- MS Table Tennis (Grades 6-8)

- MS For the Love of Books (Grade 6)
- MS Board and Card Games (Grade 6)

# **AWARDS**

# **Music & Performing Arts:**

- Winner (Flute), Yuvajanotsavam 2017 Singapore Malayalee Hindu Samajam, Singapore
- 1st Prize, Papanasam Sivan Songs Competition 2019 Sivan Fine Arts Academy, Singapore
- Participation Prize, Papanasam Sivan Songs Competition 2021 Sivan Fine Arts Academy, Singapore

# **Carnatic Flute Certifications:**

- Year 1 with Distinction (2017)
- Year 2 with Higher Distinction (2018)
- Year 3 with Higher Distinction (2018)
- Year 4 with Higher Distinction (2019)
- Advanced Level 1 to Advanced Level 2 Graduation (2020)

# **Mathematics & Science Competitions:**

- Gold Medalist, UKMT (United Kingdom Mathematics Trust) 2023
- Gold Medalist, CEMC (Centre for Education in Mathematics and Computing) 2023
- 2nd Place, American Mathematics Competition 8 (AMC 8) 2020
- Silver Award, American Mathematics Olympiad 2020
- Bronze Award, American Mathematics Olympiad 2018
- Silver Certificate, Junior Mathematical Challenge 2019
- Bronze Award, SASMO (Singapore and Asian Schools Math Olympiad) 2019
- Certificate of Excellence, SOF International Mathematics Olympiad 2017
- Certificate of Excellence, SOF International English Olympiad 2017
- Certificate of Merit, SOF International Mathematics Olympiad 2016, 2017
- Certificate of Merit, SOF International English Olympiad 2015, 2016, 2017
- Distinction, UNSW ICAS Mathematics 2017
- High Distinction, UNSW ICAS Science 2017
- Participant, BMO Round 1 (British Mathematical Olympiad) 2023

#### **Academic Excellence:**

- 1st Place, Smartest Singapore Literacy and Numeracy Challenge 2014
- Runner-Up, Smartest Singapore Literacy and Numeracy Challenge 2015
- Principal's Commendation for Academic Excellence & Contributions (Total of 18 times, 2013-2017)

#### **Sports & Athletics:**

- Community Basketball League U11 Boys Division 2 Silver Medalist (2017)
- Athletic Conference of Singapore International Schools (ACSIS):
- 3rd Place, 11U Badminton Boys Division 2 (2017-18)
- 2nd Place, 11U Cricket Boys Division 2 (2017-18)
- 2nd Place, 10x50m Relay Race (2014-15)
- Participation, Sports Day (2013)
- Swim Safer Stage 1 & 2 Awards (2016)
- 1st Poom Graduation, Singapore Taekwondo Federation (2016)
- 2nd Poom Graduation, Singapore Taekwondo Federation (2017)

#### **Arts & Community Engagement:**

- Certificate of Appreciation, Hindu Center Children's Art Competition (2014, 2015)
- Certificate of Appreciation, 'Keep Wildlife Wild' Art Exhibition (2015)
- Certificate of Appreciation, Rajasthan Government (Donation of Reverse Osmosis Water Filtration Plant)
- 1st Place, Traditional Costume Competition (2015)
- 1st Place, Spelling Bee Competition (2014)
- Participation, Spelling Bee Competition (2015-16)

# **SKILLS**

- Programming: Python, Java, HTML, CSS
- Mathematics: Olympiad-level problem solving
- Research: Data analysis, survey methodology
- Al/Machine Learning: Natural Language Processing, sentiment analysis
- Leadership: Team management, training, mentoring
- Public Speaking: TED Talk delivery, presentation skills
- Music: Carnatic flute performance (Grade 6)
- Sports: Taekwondo, Badminton